BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISOIN

Name of the Work: **Improvements to Roads and Drains at Devinagara and Lottegohalli in Ward.No.08 Kodigehalli**

Estimated Cost : 50.00 Lakhs

Job Code : **P-3111, SFC GRANTS 2017-18**

Job No : **008-17** - 000033

BRUHAT BANGALORE MAHANAGARA PALIKE

Project:Improvements to Roads and Drains at Devinagar and Lottegollahalli in Ward No 08 Kodigehalli

Est Cost: 50.00lakhs

Sl. No	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	Removing and resetting of footpath slab (P.No.265, I.No.37.56of PW, P&IWTD SR 2016-17)								
	Muneshwara block 5th cross		1	100.00	0.75	--	75.00		
							75.00	132.50	**9937.50**
	Basic rate	**125.00**							
	Area Weightage 6%	**7.5**							
	Final Rate	**132.5**							
2	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17)								
	drain	Cum							
	Muneshwara block 5th cross		1	100.00	0.60	0.50	30.00		
	Devingara 6th cross		2	161.00	0.95	0.85	260.02		
	Devi nagara 7th cross		2	105.00	0.95	0.85	169.58		
	Devinagar 6th A cross		1	121.00	0.95	0.85	97.71		
	Culvert		1	6.60	1.30	1.00	8.58		
							565.88	186.92	**105773.82**
	Basic rate	**82.00**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100**							
	Area Weightage 6%	**4.92**							
	Final Rate	**186.92**							
3	KSRRB M200-13.1. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. II. By Mechanical Means. A. Cement Concrete Grade M-15 &M-20. MORTH Specification No. 202 (P.No.134, I.No.18.20 of PW,P&IWTD S.R 2016-17)								
	for road	Cum							
	Muneshwara block 5th cross		1	100	3.5	0.180	63.00		
							63.00	465.70	**29339.10**
	Basic rate	**345.00**							
	Loading and unloading with 10km lead= 68+2.5x1.28x10 = 100	**100**							
	Area Weightage 6%	**20.7**							
	Final Rate	**465.70**							
4	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17)								
	Bed Concrete	Cum							
	drain								
	Devingara 6th cross		2	161	0.95	0.150	45.89		
	Devi nagara 7th cross		2	105	0.95	0.150	29.93		
	Devinagar 6th A cross		1	121	0.95	0.150	17.24		
	Culvert		1	6.6	1.30	0.150	1.29		
	for road								
	Muneshwara block 5th cross		1	100	3.50	0.120	42.00		
							136.34	5348.76	**729247.26**

Sl. No	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Basic rate	**5046.00**							
	Area Weightage 6%	**302.76**							
	Final Rate	**5348.76**							
5	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surfaces such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No.KBS 4.6.2 (P.No.15, I.No.4.31 of PW,P&IWTD SR 2016-17)								
	Side Walls	Sqm							
	Devingara 6th cross		8.00	161.00	--	0.675	869.40		
	Devi nagara 7th cross		8.00	105.00	--	0.675	567.00		
	Devinagar 6th A cross		4.00	121.00	--	0.675	326.70		
	Culvert		2.00	6.60	--	0.600	7.92		
			2.00	6.60	--	0.850	11.22		
							1782.24	310.58	**553528.10**
	Basic rate	**293.00**							
	Area Weightage 6%	**17.58**							
	Final Rate	**310.58**							
6	Providing and laying cement concrete using 20mm and downsize granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for RCC works laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, with all lead and lifts etc., complete (exclusive of cpost of steel and fabricaton charges) Ready Mixed Cement Concrete M 20 for Raft foundation, Column, Footing, main and secondary beams. (P.No.18, I.No.4.48 of PW, P&IWTD SR 2016-17)								
	drain	Cum							
	Bottom Slab								
	Devingara 6th cross		2.00	161.00	0.75	0.15	36.23		
	Devi nagara 7th cross		2.00	105.00	0.75	0.15	23.63		
	Devinagar 6th A cross		1.00	121.00	0.75	0.15	13.61		
	Culvert		1.00	6.60	1.20	0.25	1.98		
	Side Walls								
	Devingara 6th cross		4.00	161.00	0.15	0.60	57.96		
	Devi nagara 7th cross		4.00	105.00	0.15	0.60	37.80		
	Devinagar 6th A cross		2.00	121.00	0.15	0.60	21.78		
	Culvert		2.00	6.60	0.25	0.60	1.98		
							194.96	6231.74	**1214955.61**
	Basic rate	**5879.00**							
	Area Weightage 6%	**352.74**							
	Final Rate	**6231.74**							
7	KSRB - 4.9.2: Providing TMT steel reinforcement Fe500 for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.2 of PW, P&IWTD SR 2016-17)								
	Consider50Kgs/cum for item No. only RCC Drain Qty	Tonne		191.00	0.050	--	9.56		
	Consider80Kgs/cum for item No. only RCCCulvert Qty	Tonne		3.96	0.080	--	0.32		
							9.88	64243.42	**634724.99**
	Basic rate	**60607.00**							
	Area Weightage 6%	**3636.42**							
	Final Rate	**64243.42**							
8	Providing and fixing **RCC Precast cover slab of 100mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
		Sqm							
	Devingara 6th cross		2.00	161.00	0.75	--	241.50		
	Devi nagara 7th cross		2.00	105.00	0.75	--	157.50		
	Devinagar 6th A cross		1.00	121.00	0.75	--	90.75		

Sl. No	Description of Item	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
							489.75	1817.00	**889875.75**
	Data Rate =1817								
9	Providing and fixing **RCC Precast cover slab of 250mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
		Sqm							
	Culvert		1.00	6.60	1.20	--	7.92		
							7.92	5317.00	**42110.64**
	Data Rate =5317								
10	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum)((P.No.177, I.No.22.2.1 of PW,P&IWTD SR 2016-17)								
		Cum							
	Muneshwara block 5th cross		1.00	100.00	3.50	0.12	42.00		
							42.00	6217.96	**261154.32**
	Basic rate	**5866.00**							
	Area Weightage 6%	**351.96**							
	Final Rate	**6217.96**							
11	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No.22.7 of PW, P&IWTD SR 2016-17)								
	Muneshwara block 5th cross	Sqm	1.00	100.00	3.50	--	350.00		
							350.00	95.40	**33390.00**
	Basic rate	**90.00**							
	Area Weightage 6%	**5.4**							
	Final Rate	**95.4**							
								Total Construction Cost	**4504037.000**
12								**Cost towards Design Report , PMC / Third Party inspection LS**	**45040.37**
13								**Tender premium 10%**	**450403.70**
								Sub Total	**4999481.07**
14								**Miscellaneous and rounding off**	**518.93**
								Total	**5000000.00**

Certificate.

1 The workspot was inspected and Provisions made in the estimate are adequate and necessary.
2 Work Spot comes under BBMP limits.
3 The estimate based on PWD CSR for the year 2016-17.
4 This work is not split up.
5 These works are not taken up in any other grants and free from Defect Liability Period.
6 Earlier Improvements taken up in the proposed roads are recorded in earlier road history.

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

ADMINISTRATIVE APPROVAL
Accorded For Rs. Fifty lakhs only
Head of A/c P-3181
Div. Ref. No. 116/17-18 Date 19/12/17
AE
EE(BTP) 19/12

Technical Sanction
Accorded For 50.00 Lakhs
Head of A/C P3111
CER NO : 485 Dt: 27-12-2017
[TA] CE (TNK)